

PATENT RESPONSE UNDER  
37 CFR 1.116 EXPEDITED PROCEDURE  
EXAMINING  
GROUP (2122)  
OIP13207US01

Ser. No. 09/975,681

## REMARKS

Claims 13 and 16 are objected to as being dependent on a rejected base claim and any intervening claims but are allowable if placed in independent form with all of the limitations of their base claims and intervening claims.

Claims 13 and 16 are amended to include all of the limitations of their base claims and any intervening claims and are consequently considered to be in allowable condition.

### I. Rejection under 35 U.S.C. 102(b)

Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by EP 0 851 368 A2 – Nielsen et al. This claim is deemed to be patentable for the reasons given below.

Independent claim 14 recites a system for providing a user interface display image” including “a user interface menu generator for providing a displayable image including, a first image window listing a plurality of selectable data items individually selectable from a plurality of different types of predetermined data items available for incorporation in an expression, said plurality of different types of predetermined data items comprise predetermined data items and associated predetermined allowable values for a corresponding predetermined data item, an image prompt element permitting user entry of said expression and for incorporating a data item in said expression from said listed data items to provide a resultant expression in response to user selection of said data item in said first image window, and an icon for initiating storing of said resultant expression; and an expression processor for resolving said resultant expression to provide a result in response to user command”. These features are not shown or suggested in Nielsen.

### Issue.

A key issue is whether Nielsen in elements 260, 265 and 470 of Figures 2-4 show predetermined data items for incorporation in an expression, as alleged in the Rejection (Rejection pages 6 and 7 and elsewhere), or show user selectable options enabling selection of a directory or library to be searched to determine the scope of a search.

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The Rejection (on pages 6 and 7 and elsewhere) fundamentally **miss-understands** and **miss-interprets** the Nielsen reference and **erroneously** alleges elements 260, 265 and 470 of Figures 2-4 show predetermined data items for incorporation in an expression. This error is made in connection with all the Application claims. Nielsen elements 260, 265 and 470 of Figures 2-4 do NOT show or suggest data items for incorporation in an expression but rather unambiguously provide user selectable options enabling selection of a directory or library to be searched to determine the scope of a search. Nielsen page 6 lines 10-15 state "pull down menu 260 represents a list of options for controlling the scope of the search. If the search is unrestricted, it is viewed as a search of the **system library**. However, a user may create one or more **subsets of the system library** which are adequate for certain types of search the user may wish to undertake. These **personal libraries** may be separately identified and stored for selection. The currently selected scope indication is displayed in a display area of pull down menu 260 and the other selections may be viewed by activating the search button 265 shown on the pull down menu area". Further Nielsen page 6 line 57 to page 7 line 2 states "Memory blocks 460, 470 and 480 contain the options to be displayed in respective pull down menus when activated by a user" and "Memory block 470 contains a list of options from which the **scope of search may be selected** and stored in memory block 450".

Consequently, Nielsen recites "pull down menu 260 represents a list of options for controlling the **scope of the search**" and "memory block 470 contains a list of options from which the **scope of search may be selected**" (page 6 lines 10-15). This is corroborated in block 470 of Figure 4 showing the options available for selection comprise **libraries to be searched** (System Library, Personal Library 1, Personal Library 2) and are NOT "different types of predetermined data items available for incorporation in an expression". This is further corroborated by the dictionary definition of "scope" which means "space or opportunity to function "or "the area covered by a given activity or subject" (Websters II New College Dictionary 1999). The meaning interpreted by the Examiner renders the Nielsen description nonsensical and is in direct contradiction with the plain English meaning of the specification, the Figures and thrust of the Nielsen reference. The Nielsen system unambiguously allows a user to select the library, directory or file structure within which a search is to occur using elements 260, 265 and 470 and these elements **do not effect** the composition of the Nielsen search expression or any other expression. Also, these elements have no relevance to providing "a first image window listing a plurality of selectable data items individually selectable from a plurality of different

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types of predetermined data items available for incorporation in an expression". Nielsen provides no 35 USC 112 compliant enabling disclosure of "a first image window listing a plurality of selectable data items individually selectable from predetermined data items and **associated predetermined allowable values**".

The Nielsen system addresses the problems of difficulty of composing "string based search syntax" queries and the fact that "graphical user interfaces of the prior art do not permit a user to easily save, reuse or otherwise perform text processing on their queries or their previous queries" (Nielsen page 2 lines 39-47). In contrast, the claimed system enables "use of a "customizable expression" to "allow users to define formulas for calculating rates of reimbursement" in medical claim insurance reimbursement, for example" as well as "restriction and control of the data that is exposed to a user for entry in an expression and supports association of descriptive information with items of data exposed to users" (Application page 3 lines 32-35 and page 4 lines 23-27). Nielsen, does not recognize the advantages of using "a first image window listing a plurality of selectable data items individually selectable from predetermined data items and **associated predetermined allowable values**". Nielsen also fails to address the problems involved in providing expressions for determining an insurance reimbursement amount, for example, or contemplate the data items or user interface needed to support such determination and provides no other reason or motivation for providing the claimed features.

The arrangement of amended claim 14 provides "a first image window listing a plurality of selectable data items individually selectable from a plurality of different types of predetermined data items" that "comprise predetermined data items and associated predetermined allowable values for a corresponding predetermined data item". The arrangement incorporates "a data item in said expression from said listed data items to provide a resultant expression in response to user selection of said data item in said first image window". Nielsen does not show or suggest providing "a first image window listing a plurality of selectable data items individually selectable from a plurality of different types of predetermined data items" that "comprise predetermined data items and associated predetermined allowable values for a corresponding predetermined data item". The items relied on in the Rejection page 6 and elsewhere (GOOD BOY, GOOD GIRL etc.) are **user entered** and are NOT selectable from "a first image window listing a plurality of selectable data items individually selectable from a plurality of different types of predetermined data items" and that have "**associated predetermined allowable values** for a

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corresponding predetermined data item". The fact that these items (GOOD BOY, GOOD GIRL etc.) are user entered is clearly stated in Nielsen ("The graphical user interface shown in Figure 2 has a plurality of text entry fields 200 for receiving respective strings of characters for construction of a search (Nielsen page 5 lines 54-56), "text entries and operators specified in the fields and pull down menus"... "In the example shown, the system interprets the string "Good Boy" as a literal because the "match entire string" function is selected. Similarly, the text entry "Good Girl" is treated as a literal" (Nielsen page 6 lines 17-19))

There is no suggestion in Nielsen in connection with Figure 2 - 4 or elsewhere of "listing a plurality of selectable data items individually selectable from a plurality of different types of predetermined data items" that "comprise predetermined data items and associated predetermined allowable values". This is because Nielsen is concerned with facilitating developing search syntax expressions (see Abstract) and such search expressions do NOT use search syntax data items having "associated predetermined allowable values". Therefore Nielsen fails to contemplate or suggest providing a display image listing "selectable data items individually selectable" from "predetermined data items and associated predetermined allowable values" for incorporation in an "expression". Consequently withdrawal of the Rejection of amended claim 14 under 35 USC 102(b) is respectfully requested.

## II. Rejection under 35 U.S.C. 103(a)

Claims 1-12, 15 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 851 368 A2 – Nielsen et al in view of Netscape Communications Corporation, "JavaScript Guide", 1997 (hereinafter Netscape). These claims are considered patentable for reasons given in connection with claim 14 and for the following reasons.

Claim 1 recites a system for "providing a user interface display image supporting user entry of an expression, comprising: a user interface menu generator for providing a displayable image including, a first image window listing a plurality of data items individually selectable from a plurality of different types of predetermined data items available for incorporation in an expression used for calculating a result value, an image prompt element for permitting user entry of said expression and for incorporating a data item in an entered expression from said listed

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data items to provide a resultant expression used for calculating a result value in response to user selection of said data item in said first image window, and an icon for initiating storing of said resultant expression; and an expression processor for processing said resultant expression to provide a calculated result value in response to user command". These features are not shown (or suggested) in Nielsen with Netscape.

The system provides a "displayable image including, a first image window listing a plurality of data items individually selectable from a plurality of different types of predetermined data items available for incorporation in an expression used for calculating a result value". The system also provides "a resultant expression used for calculating a result value" in response to user selection of a "data item in said first image window" and processes the "resultant expression to provide a calculated result value in response to user command". These features enable "restriction and control of the data that is exposed to a user for entry in an expression and supports association of descriptive information with items of data exposed to users. In addition multiple user selectable template expressions are provided for user alteration advantageously facilitating the user interface process". The system also enables use of a "customizable expression" to "allow users to define formulas for calculating rates of reimbursement" in medical claim insurance reimbursement, for example (Application page 3 lines 32-35 and page 4 lines 23-27). This capability is of substantial advantage in hospital administration and improves hospital operation.

In contrast the system of Nielsen with Netscape is "directed to a graphical user interface which permits the user to quickly learn search syntax by getting feedback on how the system interprets the search strings and operators selected by the user in a graphical user interface" (Nielsen (with Netscape) page 2 lines 51-53). Nielsen with Netscape does NOT show or suggest providing a "displayable image including, a first image window listing a plurality of data items individually selectable from a plurality of different types of predetermined data items available for incorporation in an expression used for calculating a result value". The Nielsen with Netscape system is concerned with search and search expressions for obtaining search results and retrieving text and does NOT contemplate expressions for "calculating a result value", for example (Nielsen abstract).

The Rejection (Page 8) recognizes that Nielsen does NOT disclose "an expression used for calculating a result value" but erroneously states that the features

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of claim 1 would be obvious in view of expression information detailed in Netscape chapter 9. Neither Netscape nor Nielsen, individually or in combination, show or suggest "providing a displayable image including, a first image window listing a plurality of data items individually selectable from a plurality of different types of predetermined data items available for incorporation in an expression used for **calculating a result value**". As previously explained in connection with claim 14, Nielsen does not show or suggest such features. Netscape in chapter 9 or elsewhere also fails to show such features and there is no reason or other motivation for modifying the combined Netscape and Nielsen system to incorporate such features.

Netscape merely shows selectable predetermined operators and special characters for use in programming a JavaScript expression. Netscape (with Nielsen) does NOT show or suggest providing a "displayable image including, a first image window listing a plurality of data items individually selectable from a plurality of different types of predetermined data items available for incorporation" in a calculable expression. These features enable a user to select from a "plurality of different types of predetermined data items available for incorporation" in a calculable expression. As shown in the application a user is able to select from "allowable values via window 725, miscellaneous values via window 724 and operators via window 726...for inclusion in the expression, for example" (Application page 11 lines 4-7 and Figure 5).

In contrast, in Nielsen (with Netscape) a user enters character strings in items 200 and field 270 (items relied on in the Rejection page 3). Further, in Nielsen "text entry fields 200" are "for receiving respective strings of characters for construction of a search" and "system interpretation field 270 represents a combination of the text fields and operators". Also, "pull down menu 260 represents a list of options for controlling the scope of the search. If the search is unrestricted, it is viewed as a search of the system library" that is menu 260 allows selection of sources to be searched. Further, menu 210 allows selection from a "plurality of operators", button 265 enables "activating the search" and "button 275 represents a pull down menu activation for causing a display of previously entered queries which have been submitted to the system" (Nielsen page 2 line 54 to page 3 line 27).

Consequently, items 200 are fields allowing user entry of search text, item 270 shows a created search expression, item 260 allows a user to select a library to be searched and item 265 is a search activation button. Therefore, items 200, 260,

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265 and 270 are NOT “predetermined data items available for incorporation” in a calculable expression. Items 210 allow selection of logical search operators (AND, OR etc.) and are NOT (and do not suggest) “data items individually selectable from a plurality of different types of predetermined data items available for incorporation” in “an expression used for **calculating a result value**”. The menu 210 operators are used to construct a logical search term to locate specific search results and NOT calculate a value. Similarly, item 275 enables location of previously “entered queries which have been submitted to the system” as searches and do NOT comprise expressions “used for **calculating a result value**”. Consequently, Nielsen with Netscape does not show or suggest a “displayable image including, a first image window listing a plurality of data items individually selectable from a plurality of **different types** of predetermined data items available for incorporation” in “an expression used for calculating a result value”.

Further, the Nielsen with Netscape system addresses the problems of difficulty of composing “string based search syntax” queries and the fact that “graphical user interfaces of the prior art do not permit a user to easily save, reuse or otherwise perform text processing on their queries or their previous queries” (Nielsen with Netscape page 2 lines 39-47). In contrast, the claimed system enables “use of a “customizable expression” to “allow users to define formulas for calculating rates of reimbursement” in medical claim insurance reimbursement, for example” as well as “restriction and control of the data that is exposed to a user for entry in an expression and supports association of descriptive information with items of data exposed to users”. (Application page 3 lines 32-35 and page 4 lines 23-27). Nielsen with Netscape, does not address these problems and the problems involved in providing expressions for “calculating a value” such as an insurance reimbursement amount or contemplate the items or user interface needed to support such a calculation and provides no other reason or motivation for providing the claimed features. The combination of Nielsen with Netscape systems as suggested in the Rejection results in a search user interface supporting “string based search syntax” queries implemented using JavaScript programming language and operators. Such a system fails to suggest “providing a displayable image including, a first image window listing a plurality of data items individually selectable from a plurality of different types of predetermined data items available for incorporation in an expression used for **calculating a result value**”. Consequently, withdrawal of the rejection of amended claim 1 under 35 USC 102(b) is respectfully requested.

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Dependent claim 2 is considered to be patentable based on its dependence on claim 1. Claim 2 is also considered to be patentable because Nielsen with Netscape does not show (or suggest) a system in which the "plurality of different types of predetermined data items comprise predetermined data items and associated predetermined allowable values for a corresponding predetermined data item and said data item is incorporated in said expression together with an operator comprising at least one of, (a) a logical operator and (b) an algebraic operator to provide said resultant expression". The Nielsen Figure 2 image items 200, 210 260, 265, 270 and 275 are NOT "predetermined allowable values for a corresponding predetermined data item" for incorporation in an expression (Nielsen with Netscape page 2 line 54 to page 3 line 27). As previously explained, items 200, 260, 265 and 270 are NOT "predetermined data items" at all.

Further, available items 210 are logical search operators (AND, OR etc.) which are NOT data items since a "data item is incorporated in said expression together with an operator". That is an operator is used to link data items in an expression and is NOT a data item itself in the claim 2 arrangement and also does NOT comprise "predetermined allowable values for a corresponding predetermined data item". Similarly, item 275 enables location of previously "entered queries which have been submitted to the system" as searches and as such does not suggest generation of an image window permitting user selection of "predetermined allowable values for a corresponding predetermined data item".

Dependent claim 3 is considered to be patentable based on its dependence on claim 1. Claim 3 is also considered to be patentable because Nielsen with Netscape does not show (or suggest) a system in which the "different types of predetermined data items comprise at least one of, (a) a patient identifier, (b) a medical condition identifier, (c) a patient address and (d) patient medical record information". These items are used in the "resultant expression" to **calculate** a "result value", such as an insurance reimbursement value for a specific patient and medical condition, for example. The Nielsen with Netscape search expression based system does not contemplate providing a "calculated result value" using such data items at all.

Dependent claim 4 is considered to be patentable based on its dependence on claim 1. Claim 4 is also considered to be patentable because Nielsen



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with Netscape does not show (or suggest) a system involving the claim 4 combination of features in which the "predetermined data items are individually selectable by selection of displayed elements in a **hierarchical tree structure**, said displayed elements representing predetermined data items". Such a hierarchical tree structure is nowhere contemplated or suggested in Nielsen with Netscape.

Dependent claim 5 is considered to be patentable based on its dependence on claim 1. Claim 5 is also considered to be patentable because Nielsen with Netscape does not show (or suggest) the claim 5 feature combination involving an "expression processor" that "verifies an entered expression is valid and generates an indication as said result identifying said entered expression is invalid" and "initiates generation of a displayed notification to a user indicating said entered expression is invalid". Nielsen with Netscape does not contemplate these features in combination with the features of claim 1.

Dependent claim 6 is considered to be patentable based on its dependence on claim 1.

Dependent claim 7 is considered to be patentable based on its dependence on claim 1. Claim 7 is also considered to be patentable because Nielsen with Netscape does not show (or suggest) the feature combination involving an "expression processor" that "resolves said resultant expression to provide a result comprising a financial reimbursement sum determined per health care policy terms". As previously explained, Nielsen with Netscape is concerned with search and search expressions for obtaining search results and retrieving text and does NOT suggest an "expression processor" that "resolves said resultant expression to provide a result comprising a financial reimbursement sum determined per health care policy terms". Nielsen with Netscape does not contemplate expressions for "calculating a result value" at all (see Nielsen abstract).

Dependent claim 8 is considered to be patentable based on its dependence on claim 1. Claim 8 is also considered to be patentable because Nielsen with Netscape does not show (or suggest) a feature combination in which "said plurality of different types of predetermined data items include **miscellaneous** values comprising **predetermined specific words**".

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Dependent claim 9 is considered to be patentable based on its dependence on claim 1. Claim 9 is also considered to be patentable because Nielsen with Netscape does not show (or suggest) a feature combination in which "said displayable image includes an image prompt element supporting user entry of a **name** for identifying a resultant expression and said user interface menu generator provides an image window permitting user selection of a template calculable expression from a plurality of predetermined template expressions". Contrary to the Rejection statements, Nielsen with Netscape in Figure 5 does not show or suggest "entry of a **name** for identifying a resultant" calculable expression.

Dependent claim 10 is considered to be patentable based on its dependence on claim 1. Claim 10 is also considered to be patentable because Nielsen with Netscape does not show (or suggest) a feature combination in which "said user interface menu generator provides an image window permitting user selection of a template **calculable** expression from a plurality of predetermined template calculable expressions and said image prompt element incorporates a selected template **calculable** expression in response to user selection of said selected template calculable expression". Nielsen with Netscape does not contemplate expressions for "calculating a result value" at all.

Dependent claim 11 is considered to be patentable based on its dependence on claim 1. Claim 11 is also considered to be patentable because Nielsen with Netscape does not show (or suggest) a system in which a "said first image window lists a plurality of selectable data items in a **hierarchical tree type** structure and said plurality of selectable data items are associated with user accessible data item descriptions". Nielsen with Netscape nowhere suggests use of an "image window" that "lists a plurality of selectable data items in a **hierarchical tree type structure**".

Dependent claim 12 is considered to be patentable based on its dependence on claim 1. Claim 12 is also considered to be patentable because Nielsen with Netscape does not show (or suggest) a system in which "said icon for initiating storing of said resultant expression initiates allocation of a **version identifier** to said resultant expression". Nielsen with Netscape nowhere suggests such features.

Dependent claim 15 is considered to be patentable based on its dependence on claim 14. Claim 15 is also considered to be patentable because Nielsen with Netscape does not show (or suggest) "said expression comprises a calculable

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expression, and said expression processor processes said resultant expression to provide a calculated result value in response to said user command". As previously explained in connection with claims 1, 2 and 14, Nielsen with Netscape nowhere suggest such a combination of features or provide any problem recognition or other motivation for incorporating such a combination of features.


Amended independent claim 17 is considered to be patentable for reasons given in connection with claim 1.

Dependent claim 18 is considered to be patentable based on its dependence on claim 17. Claim 18 is also considered to be patentable because Nielsen with Netscape does not show (or suggest) the feature combination of claim 18 in which "said expression processor processes said resultant expression to determine said resultant expression is valid and wherein said system for providing a user interface display image comprises machine executable code stored on a tangible storage medium".

Independent method claim 19 mirrors system claim 1 and is considered to be patentable for the same reasons. Consequently withdrawal of the Rejection of claims 1-12, 15, and 17-19 under 35 USC 103(a) is respectfully requested.

In view of the above amendments and remarks, Applicants submit that the Application is in condition for allowance, and favorable reconsideration is requested.

Respectfully submitted,

  
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Date: February 9, 2005

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